

REMARKS

Claims 9-15 and 18-25 are currently pending. Claims 9-12, 14, 15, and 18-25 have been amended for clarification. Claim 18 was also amended in accordance with the patent examiner's suggested in the telephone interview held on November 13, 2008, so as to recite subject matter from the preamble into the body of that claim. The amendment of the claims is supported by the original disclosure, including the original claims. It is respectfully submitted that no new matter has been added.

Objection to Claim 14

Applicant thanks the Patent Office for the indicated of allowability subject matter in claim 14. However, Applicant believes all currently pending claims are allowable.

Finnish Foreign Priority Document through International Application No. WO 03/058995

As a correction from Applicant's prior Response, the subject application has a foreign priority date of January 10, 2002, through **Finnish** patent document number 20020048, through International Publication No. WO 03/058995. The foreign priority date is prior to the filing date of March 12, 2002 of Mildh et al. Even though Mildh et al. claim priority to US provisional patent application no. 60/280,305, it is not known if the subject matter upon which the Patent Office relies in rejecting the claims also is found in this provisional patent application.

Telephone Interview

A telephone interview was held on November 13, 2008, between U.S. Patent and Trademark Office patent examiner Ariel Balaoing and Applicant's representative Walter Malinowski. Prior to that interview, Applicant's representative had sent the patent examiner a telephone interview agenda in which Applicant asserted that Mildh, the primary reference, did not teach a second broadcast channel or use of a spare bit to provide information as to availability of a service. The patent examiner shortly after the telephone interview commenced agreed that Mildh did not provide such a teaching. Furthermore, the patent examiner recommended that the preamble of claim 18 be incorporated into the body of claim 18. The patent examiner also recommended that a response after final pointing out the deficiencies of Mildh and with the

amendment of claim 18 be filed so as to trigger a response on his part.

In response to the Telephone Interview Summary mailed November 17, 2008, by the Patent Office, Applicant agrees that “cell information as described by Mildh is included in only a first message sent in a broadcast channel and Mildh broadcasts a command and not an availability message.”

Response to the Response to Arguments

Please see the telephone interview summation immediately above.

Claim Rejections – 35 USC § 103

The Patent Office rejected claims 9-13, 15, 18, and 19 under 35 U.S.C. 103(a) as being unpatentable over Mildh, U.S. Published Patent Application No. 2002/0193139, in view of Applicant's Background of the Invention.

In the previous response, Applicant argued that Mildh does not disclose the feature describing a second broadcast control channel ... or “.. then a second broadcast control channel through which service information of the one of the two or more service modes (is to be broadcast is described)”. The Patent Office, on page 2 of the Final Office Action dated September 9, 2008, now refers to paragraphs 16 and 17 of Mildh and explains that a system information message is sent in the broadcast channel, which message details which network the mobile should camp on.

Then the Patent Office continues that “(this message) therefore includes pilot channel information (PBCCH)”. It is not clear if the Patent Office means that a second broadcast channel is described for sending the needed lu information to mobile stations. Regarding this assertion:

- 1) The asserted subject matter does not come from the Mildh's publication.
- 2) Neither the Mildh's publication nor the present application discloses a 'pilot channel.'
- 3) There is no disclosure about a second broadcast channel the cited paragraphs. All the information for the mobile stations is included in the first and only message sent in a broadcast channel.

In addition, the Patent Office argues that “paragraph 18 shows the mode selection via a network control using various control channels available and determines selection of a core network’. However, the channels in question are optional channels, and the paragraph discloses

the kind of information can be sent in the selected channel. (PACCH mentioned as one option is the associated control channel used by a mobile station individually after the speech or data connection already has been established. It would not be necessary to 'describe' such a channel.)

Also paragraph 18 discloses nothing about a second broadcast channel for sending the Lu information to respective mobile stations.

If the channel used in the solution of Mildh is considered a 'second' broadcast channel, then Mildh would not disclose a separate first channel, in which a first and second message defined in claim 1 are sent.

In the present invention, in a GSM system, a message S13 with a GPRS indicator is sent to channel BCCH, and further information concerning GPRS service in this cell is sent in message S113 to the BCCH. In the cells that support UMTS service but not GPRS service, the messages S113 are not sent and this message can then not be used for transferring the required Lu information to mobile stations. Therefore, the only spare bit in message S13 is defined as a bit indicating, whether the current cell supports UMTS service through the Lu interface or not, and if yes, an announcing of the channel in which Lu information is placed, is sent to mobile stations. Mildh does not concern this kind of configuration.

Furthermore, claim 10 recites "an availability of one of the two or more service modes is indicated through a single spare bit in the first message" and claim 18 recites "using of said at least one spare bit for indicating whether said cell supports an UMTS service." Mildh teaches in paragraph 0016 "for example, one bit in the SI/PSI could tell the mobile station 32 to select the 2G (for 3G) core network if the mobile station has not previous active registration in either core network it is turned on" and "another bit could tell the mobile station to stay in the core network it currently is in, or to move to the 3G CN in any event," but each of these teachings is more of a command and does not seem to be at all a teaching of "an availability of one of the two or more service modes is indicated through a single spare bit in the first message" or "using of said at least one spare bit for indicating whether said cell supports an UMTS service," as claimed.

As to Applicant's Background of the Invention (i.e., paragraph 0006) providing a teaching for using a spare bit for indicating whether a cell supports an UMTS, Applicant's Background of the Invention discloses that message SI3 could be used as a GPRS indicator and a proposal for adding a two-bit field in the part of the message SI3. Applicant's Background of the Invention,

in paragraph 0006, further notes “there is no room for the required information in other messages sent regularly to the BCCH.” There does not appear to be a disclosure in Applicant’s Background of the Invention of “an availability of one of the two or more service modes is indicated through a single spare bit in the first message” or “using of said at least one spare bit for indicating whether said cell supports an UMTS service” or a disclosure of a second broadcast control channel ... or “.. then a second broadcast control channel through which service information of the one of the two or more service modes (is to be broadcast is described).”

Thus, claims 8-15 and 18-25 are allowable over Mildh in view of Applicant’s Background of the Invention.

The Patent Office rejected claims 20-23 under 35 U.S.C. 103(a) as being unpatentable over Mildh, U.S. Patent Application No. 2002/0193139, in view of Applicant’s Background of the Invention and further in view of ETSI 3GPP 04.18 v 9.0.

The addition of any alleged descriptions of the prior art and/or ETSI 3GPP 04.18 v 9.0 does not disclose or suggest the subject claims. In particular, the Patent Office refers to paragraph 6 of the subject application (i.e., Applicant’s Background of the Invention). Paragraph 6 of Applicant’s specification refers to a conference publication by Ericsson Ltd. about a proposal for adding a two-bit field in the part of the message SI3. As further disclosed in this paragraph, there is only one spare bit left in the SI3 Rest Octets and there is no room for the required information in other messages sent regularly to the BCCH. This information does not cure the shortcomings of Mildh et al. and disclose or suggest the subject claims. On the contrary, Applicant’s claims remove a disadvantage of other methods, as disclosed at pages 2-3 of Applicant’s specification. Similarly, the addition of ETSI 3GPP 04.18 v.9.0, cited by the Patent Office for disclosing system information 13, does not disclose or suggest Applicant’s claims.

The Patent Office rejected claim 24 under 35 U.S.C. 103(a) as being unpatentable over Mildh in view of Applicant’s Background of the Invention and ETSI 3GPP 04.18 v 9.0 as applied to claim 20 (?) (Office Action states “claim 3” – a canceled claim), and further in view of Raith, U.S. Patent No. 5,930,706.

The Patent Office asserted that “RAITH discloses an indicator field indicating whether normal BCCH or extended BCCH is used to transfer a message (paragraph 21, line 22-57).” Raith, U.S. Patent No. 5,930,706, does not use paragraph numbers. It is presumed that the Patent

Office meant column 21, lines 22-57.

The Patent Office admits Mildh in view of the Applicant's Background of the Invention and ETSI 3GPP 04.18 v 9.0 "does not expressly disclose an indicator field indicating whether normal BCCH or extended BCCH is used to transfer a message."

The Patent Office considers Raith to provide a teaching to overcome this deficiency.

Raith, in column 21, lines 22-57, discloses as follows:

The F-BCCH and E-BCCH allow the system to transmit different kinds of overhead information at different rates depending on its importance to the proper operation of the mobile stations. **Information defining the system configuration and the rules for system access by the mobile stations is transmitted in the F-BCCH. Since this information should be transmitted at a rate which allows the mobile station to quickly access the system, a complete set of this information is sent in the F-BCCH once every superframe.** Less critical overhead information, however, may be transmitted at a lower rate in the E-BCCH. A complete set of E-BCCH information may span several superframes. The S-BCCH, on the other hand, allows the system to decouple the transmission of overhead information from the broadcast SMS by providing a dedicated channel for SMS messages.

To decouple the requirement of periodicity of reading of the overhead information by the mobile station (for purposes of efficient sleep mode operation) from the requirement of periodicity of BCCH transmission by the system (for purposes of fast acquisition at cell selection), **each of the F-BCCH and E-BCCH subchannels is associated with a change flag in another logical subchannel, which indicates when the corresponding BCCH information has changed (e.g., changes in the F-BCCH are indicated by a change flag in the PCH and changes in the E-BCCH are indicated by a change flag in the F-BCCH).** The change flags enable a mobile station to avoid re-reading BCCH information which has not changed thereby reducing battery drain, as taught in U.S. Pat. No. 5,404,355. The mobile station will first read the required BCCH information when acquiring the DCCH. Thereafter, however, the mobile station will read only changed BCCH information and can stay in sleep mode when there is no change in the BCCH information. This allows for efficient sleep mode operation (i.e., low periodicity of reading BCCH information) and, at the same time, fast acquisition at cell selection (i.e., higher periodicity of BCCH transmission).

Raith discloses a change in the F-BCCH is indicated by a change flag in the PCH and a

change in the E-BCCH is indicated by a change flag in the F-BCCH. Raith also discloses “Information defining the system configuration and the rules for system access by the mobile stations is transmitted in the F-BCCH” once every superframe. Raith does not disclose or suggest “Iu indicator field indicating, whether normal broadcast control channel or extended broadcast control channel is used to transfer the second message,” where the first message comprises the Iu indicator field.

Thus, claim 24 is allowable over Mildh, Applicant’s Background of the Invention, ETSI 3GPP 04.18 v 9.0, and Raith.

It is respectfully submitted that the rejections of claims 9-15 and 18-25 under 35 U.S.C. 103(a) based on Mildh, in view of Applicant’s Background of the Invention whether or not further in view of ETSI 3GPP 04.18 v 9.0, and/or Raith, have been overcome, and respectfully requested that the Patent Office reconsider and remove the rejections of these claims. The Patent Office is respectfully requested to favorably consider and allow all of the pending claims 9-15 and 18-25 as now presented for examination. An early notification of the allowability of claims 9-15 and 18-25 is earnestly solicited.

Serial No.: 10/501,019
Art Unit: 2617

Respectfully submitted:

Walter J. Malinowski

Walter J. Malinowski

December 1, 2008

Date

Reg. No.: 43,423

Customer No.: 29683

HARRINGTON & SMITH, PC

4 Research Drive

Shelton, CT 06484-6212

Telephone: (203) 925-9400, extension 17

Facsimile: (203) 944-0245

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450.

December 1, 2008 John Longetti

Date

Name of Person Making Deposit